Improving NHS productivity

The secondary care doctor's perspective

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The King's Fund

Contents

Summary

This paper explores the role of medical leadership and engagement as a means to improve productivity. It looks at the evidence about how doctors may best improve productivity, and how doctors practising today feel about this.

We begin with a personal perspective from Claire Lemer of Diagnosis, which looks at how we can engage doctors and create the right environment to support clinical leaders and innovation. We then explore four themes around tackling productivity from a secondary care doctor's perspective. We combine a brief overview of literature with views of hospital doctors in these four areas. A summary of the findings is laid out below.

Engaging Clinicians

Organisations that engage their employees have higher levels of productivity and performance. Doctors have a large influence over how money is spent; they lead health care teams and can directly influence the success of initiatives to address productivity. Therefore, medical engagement is important for effecting change successfully. For engagement to work, there needs to be increased emphasis throughout clinical careers. Engagement can be improved through supporting individuals and through organisational change. The following factors were found to be key to effective medical engagement:

- clinical leadership
- closer working to improve doctors' relationships with managers
- understanding one's role within the organisation and health system
- measuring engagement within the organisation
- empowering clinicians to identify and lead change.

Tackling variation

Tackling clinical variation has been shown to be one of the most important ways to address productivity. Issues include doctors' awareness, how to identify warranted, as opposed to unwarranted, variation, and enabling doctors to address variation at a local level.

Tackling variation is a complex issue. At the clinician level, potential ways to tackle variation include:

- supporting clinicians to utilise data
- improving the quality of data
- providing data in a systematic way.

At the individual clinician level, tackling variation includes:

- encouraging the use of locally adapted protocols and guidelines
- shared decision-making

- empowering clinicians to lead programmes and initiatives such as service-line management (SLM).

Incentivising productivity

Financial incentives have their place and have been shown to be successful in improving care in many areas. However, there are several issues with current financial incentives systems, and changes should be considered in order that they can be better used to tackle productivity. These changes include re-interpreting the consultant contract, and using job planning and supporting professional activities (SPAs) to align personal objectives with organisational priorities around productivity. Incentivising productivity requires a multifaceted approach and, in particular, increasing the use of non-financial incentives should be further explored. Doctors identified several non-financial incentives as important, including additional time for research, recognition, and improved training.

Developing new ways of working

Changing roles and skill-mix is challenging, but it is necessary in order to improve productivity. However, it brings to the fore questions about autonomy, professionalism, and regulation of new roles. Most doctors felt that their role was changing and should change in order to deliver health services to better meet current and future demands. Communication and engagement in new ways of working were particularly important in effective implementation; training in teamwork in multidisciplinary settings and inter-professional learning were also found to be important. Lessons learned from altering skill-mix in primary care have also been drawn upon.

1 Introduction

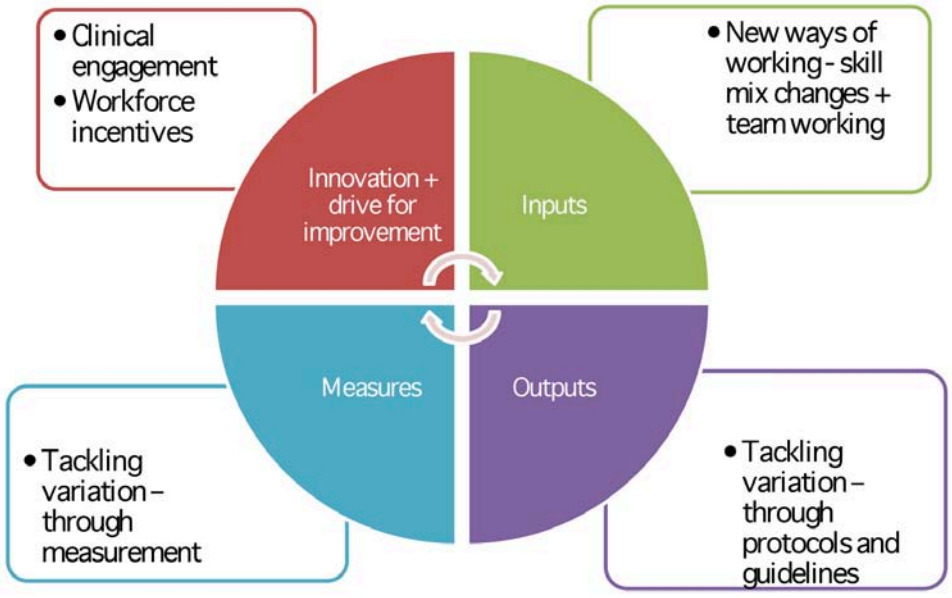
In July 2010, The King's Fund produced a paper entitled *Improving NHS Productivity: More with the same not more of the same* (Appleby *et al* 2010a). It provided a wide-ranging analysis of the productivity challenge facing the NHS and the role of each part of the service in meeting that challenge. The paper emphasised the importance of clinical leadership and engagement, particularly at the level of the 'clinical microsystem', if the NHS is to improve productivity. The paper also identified opportunities to increase productivity through:

- reducing variation in clinical practice and improving clinical decision-making
- new ways of working and skill-mix changes
- thinking creatively about workforce incentives, including better use of the current contractual frameworks.

These are themes that have since been highlighted by Charlton *et al* (2011) within their productivity improvement model (*see* Figure 1 below). They argue that:

- clinical engagement and workforce incentives provide a means to drive motivation for improvement
- new ways of working provide a means to improve efficiency and reduce inputs
- tackling variation through measurements in order to improve measures of productivity measurement and improve the quality and outcomes from clinical care.

Figure 1: Productivity improvement model



Adapted from Charlton *et al* (2011)

Forty per cent of health service funding is spent on services provided by acute and foundation hospitals (National Audit Office 2010) and therefore increasing producitivity in secondary care will make a significant contribution to the productivity gains required in the NHS. The critical role that the clinical workforce will play in driving up productivity led The King's Fund to commission Diagnosis, a doctor-led social enterprise, to examine the role of secondary care doctors in meeting the productivity challenge. This report looks at how the evidence suggests that doctors may best improve productivity, and how doctors practising today feel about this. There were three elements to the research. A literature review examined the evidence base surrounding the four themes (engaging clinicians, tackling variation, incentivising productivity and developing new ways of working). This was used to inform semi-structured interviews with key personnel. The resulting data were then triangulated with focus groups of consultants, clinical managers and junior doctors.

This paper focuses on the role of secondary care doctors in improving productivity. It examines two key areas:

- productivity issues or solutions that will have a direct impact on secondary care doctors' working lives or their terms and conditions of employment
- initiatives that will require the co-operation of secondary care doctors to bring about improvements in productivity.

We begin with a personal perspective from Claire Lemer at Diagnosis, which looks at how we can engage doctors and create the right environment to support clinical leaders and innovation.

Section two looks at how **medical engagement** underpins productivity gains, and the barriers to engagement at an individual and organisational level. Different ways of addressing some of these barriers are outlined from the literature and from a doctor's perspective.

Section three examines **variation** at the individual clinician level and outlines how variation relates to productivity. We highlight some of the issues involved in tackling variation, particularly from an individual clinician perspective, and discuss possible ways to tackle variation in clinical practice.

Section four focuses on **incentives** for improving staff productivity in secondary care and identify some of the financial and non-financial incentives that are being used. The barriers to using incentives and potential solutions are outlined.

Section five identifies the need for **new ways of working** to address productivity. We focus on changes in roles and skill-mix, and teamworking, and discuss options for facilitating new ways of working from a doctor's perspective.

2 Engaging clinicians: a personal perspective

Claire Lemer

From my current roles as doctor and operational manager, I have the privilege of seeing the health care world through a number of different lenses. In this section, I explore how this has helped me to develop some thoughts on how to create the right environment to develop the kind of innovation and leadership from doctors that we really need to bring forward some of the ideas around productivity and quality. There are three things that I would highlight.

First, there needs to be a real belief and commitment to the premise that clinical leadership really matters. Second, we have to put our money where our mouths are and start investing in training at all stages within organisations. Third, and I think most important of all, we have to have organisations that allow failure. We have to give people the chance to make mistakes and to not have their heads chopped off, and to learn from those mistakes and grow and develop – clearly not while affecting patient care, but within small-scale pilots where changes are tested and reviewed.

There's a strong body of evidence that medicine is a professional bureaucracy (Freidson 1986). So if you want to change the culture, you have to get the doctors and other clinicians on board. Doctors need to be the advocates for change. There is evidence which shows that when you do that, you start to make a difference to clinical and other outcome measures (Castro *et al* 2008). The people who are spending NHS resources are then being held accountable.

We also have to accept that there are clinicians who have particular specialist knowledge that is really important to the sorts of changes we're trying to create. One example is the work of a paediatrician, Paul Batalden, and colleagues (*see* Nelson *et al* 2007). He found that if you want to change organisations, you can start at all different levels, but one of the most important places to start is at what he calls the micro-system level, the clinical team, the front line. It is here that drives the use of resources and makes a direct difference to outcomes. The role of the organisation or the meso system, as he calls it, is to empower that front line. This is a slightly different way of thinking from the way that most clinicians will tell you that they're treated on a day-to-day basis.

There are many examples of how we have started to invest in training. One is a programme called Prepare to Lead, which involves mentoring for doctors who are interested in taking on leadership roles. Other examples include work carried out by Imperial who have just run a pilot called Paired Learning, where they put together junior doctors and managers at similar levels and they try to encourage them to do quality improvement projects together. It has had an enormous effect on morale and also started to develop new projects which are actually delivering savings. The pilot has won an Elizabeth Paice London Deanery award for Best Clinical Leadership Development Initiative.

Then there are organisations that are starting to address some of the problems that go beyond just juniors – I'm thinking about supporting new consultants and how they face some of the challenges. I work in a trust

called the North Middlesex and they run a fantastic programme for young consultants called Fast and Focused. It takes them through various elements that they might not otherwise have covered, like how to do a business plan, how to understand some of the complex financial arrangements in the NHS, and how to deal with HR issues. The programme is very focused; they try to do it in bite-sized amounts, and at times when consultants can actually get to the sessions. I fear many of these investments are threatened by some of the cost-improvement programmes and the structural changes that are happening (many were supported by strategic health authorities and primary care trusts). If we want these to continue, we have to start to think about who's doing the investment and why, and who's getting the benefits.

Lastly, there is the idea of allowing for failure. In my operational role, I see so many fantastic ideas and hear so much enthusiasm from clinicians, yet all too often that doesn't produce the kind of initiatives we would hope for. In part, it's because of constraints like time and money, but mostly I think it's because people aren't prepared to take the sorts of risks that are needed. If you don't make mistakes, you can't learn. I've been involved in all sorts of small projects, where we've had to do things despite there being no evidence that it would necessarily work. But if you can try it, to see if it works, and if it does work, it can then generate enthusiasm and excitement, and from that you see a culture change. If we don't allow for failure, we won't start to see that kind of culture shift.

The best example of a remarkable change and cultural shift is the work that I have seen at Jönköping. This is a hospital in the south west of Sweden that serves about the same size population as a district general hospital in the UK. Jönköping has been on a quality journey for the past 10 to 15 years. It has enabled nearly 65 per cent of their haemodialysis patients to self-manage their treatment. That doesn't just mean that they come in and they have a little bit of involvement in their care; these are patients who have swipecard access to a purpose-built dialysis unit, who can walk in at any time of the day or night, set up complicated medical equipment for themselves, and manage their own haemodialysis. This approach allows these patients to have proper social interactions and, most importantly, to feel like real people again – not just patients at the mercy of institutions.

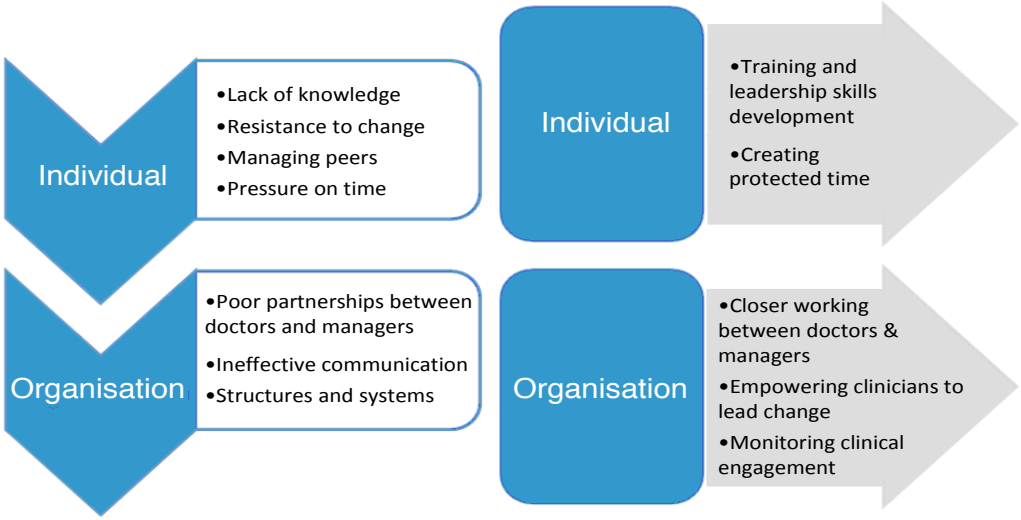
There was an absolute belief from the hospital management that this was the right thing to do and that they were going to allow it to grow slowly and support it. There have been failures along the way and there have been challenges to ethics and legal requirements, but they have not given in because it's difficult, and they've been enormously brave. I can think of few examples in the UK that have been as radical. Jonkoping's success is inspirational, and I believe that we could do it in the UK beyond just haemodialysis if we started to think differently about the three areas that I have just described.

3 Engaging clinicians

Medical engagement occurs when doctors are involved at a level where they are able to influence decisions as part of an ongoing, two-way relationship (Dickinson and Ham 2008). An engaged employee is one who is aware of the organisational context, and works with their colleagues to improve performance (Ellins and Ham 2009).

Clinical engagement underpins all the themes discussed in this report. In order to address productivity, successful clinical engagement is required at all levels. However, engagement is not easy to 'get right'. The barriers and potential solutions to clinical engagement are shown in Figure 2, and we then go on to discuss these in more detail.

Figure 2: Barriers and solutions to engaging clinicians



Barriers to engaging clinicians

Medical engagement is influenced by factors at different levels: the individual level (eg, knowledge, resources) and the organisational level (eg, structure). There are also barriers at the system level, but we do not explore these in depth here. Despite its importance, there is a fairly limited amount of literature on the barriers to medical engagement specifically relating to productivity; therefore, we have drawn upon literature on engagement in quality and safety improvement.

Barriers at an individual level

- ***Lack of knowledge***

There is a paradox that members of the most 'powerful' profession often feel powerless in the face of bureaucracies (Edwards 2003). This results, in part, from a lack of understanding of wider issues. Many doctors lack knowledge in areas of finance, economics, strategy and policy, which makes it difficult to engage them in projects at a complex organisational level (Edwards *et al* 2002; Smith 2003).

The focus groups revealed that many doctors feel they lack key knowledge and skills such as understanding how the NHS and local environment works, how to performance manage, HR issues, and understanding financial statements – all of which can be barriers to engagement in addressing productivity.

- ***Resistance to change***

Some doctors are unwilling to engage with changes unless they can see the direct benefits for their patients. Others feel they are already adhering to best practice, or feel that admitting to inefficiencies might reflect poorly on them (Parand *et al* 2010; Gollop *et al* 2004; Davies and Harrison 2003). Some doctors feel that the proposed evidence and measures for initiatives to improve engagement lack validity (Pronovost *et al* 2011). Doctors we spoke to talked about their frustration at the enormous effort required to effect change.

- ***Managing their peers***

Those in more senior managerial positions often find that their biggest challenge is managing their peers. Few seem to be comfortable doing this. Several doctors we talked to cited examples of being challenged by colleagues, and the negative impact this had had.

- ***Pressure on time***

Lack of time, competing pressures, perception of additional workload, and waste of resources are all barriers to engagement (Siriwardena 2009; Parand *et al* 2010; Davies *et al* 2007; Davies and Harrison 2003). Doctors we spoke to felt that squeezing in these responsibilities among a crowded clinical schedule is problematic and does not engender enthusiasm.

Barriers at an organisational level

- ***Poor partnerships between doctors and managers***

Managers and doctors often appear to have different priorities. This can create tensions in working relationships (Davies and Harrison 2003), with some doctors feeling disempowered, which can lead to scepticism and resistance to change (Siriwardena 2009; Dickinson and Ham 2008; Halligan 2008; Gollop *et al* 2004).

One doctor told us that: *The managers know that they do not have the leverage, and the clinicians play on it. The result is a frustrated war of, 'We want you to do this…'. 'You can't make us do it…'. We are always complaining among ourselves, but we never go looking for the manager responsible.* Doctors felt that there is also still insufficient attention paid to effective training of managers and doctors together.

- ***Ineffective communication***

Poor communication, lack of dialogue, and involving doctors too late in the change process are commonly cited as barriers to engagement (Halligan 2008; Parand *et al* 2010; Gollop *et al* 2004). The doctors we talked to tended to focus on the poor quality of communication between clinicians and managers. Others told us they wanted to be consulted more about any changes.

- ***Structure and systems***

Complexities in organisational systems make it difficult for doctors to engage. Lack of information technology, management systems, ineffective

processes and staff turnover all create barriers to engagement (Halligan 2008; Wolfson *et al* 2009). Organisational mergers and multi-layered management structures make it more difficult for doctors to engage (Davies and Harrison 2003). Junior doctors felt that engagement is often challenging because trainees move jobs regularly and they find it difficult to build relationships with managers and to engage with the organisation.

Solutions to engaging clinicians

Engagement can be addressed at the individual and the organisational level, within teams, and within and between professions (Dickinson and Ham 2008). Possible solutions to addressing the barriers of medical engagement include the following.

Supporting individuals

- ***Training and leadership skills development***

Training doctors in management, organisational and teamwork skills will help engagement. Leadership courses can help equip doctors with the skills to manage their peers. The work of the National Leadership Council, the creation of the Medical Leadership Competency Framework, and Faculty of Medical Management and Leadership may facilitate this (Faculty of Medical Leadership and Management 2011). Those we spoke to were increasingly self-directed in addressing gaps in their knowledge, but they also felt that increased investment and attention should be paid to this area.

- ***Creating protected time***

Given current resource constraints, this will be challenging to address, but in order to facilitate doctors to engage and lead projects to improve productivity effectively, some require protected time in order to undertake this. Doctors discussed ring-fenced time in job plans as one possible way to address this.

Changing organisations

- ***Closer working between doctors and managers***

Many hospital trusts or foundation trusts have succeeded because of their strong manager–clinician relationships (Warwick 2011). Encouraging doctors and managers to work more closely through initiatives such as inter-professional learning may also improve relationships (Ahmed-Little *et al* 2011; Klaber *et al* 2011). Other schemes may be beneficial, including mentoring programmes for junior doctors, pairing them with senior managers; and doctors having a dedicated year working within the managerial quality improvement world (Stanton and Warren 2010). Focus groups identified a desire to break down professional barriers, and some doctors felt that viewing problems from a manager's perspective helped to initiate conversations and create effective relationships. Some immediate solutions included co-siting managers and clinicians, and introducing managers at doctors' inductions. However, longer-term solutions proposed included joint education and training between doctors and managers.

- ***Empowering clinicians to lead change***

More attention should be given to medical leadership roles and supporting doctors to take on these roles, including mechanisms to identify future leaders and nurture the relevant skills (Dickinson and Ham 2008).

Organisations should also recognise and identify leaders who might not be formal leaders in the organisation, but may be influential (Dickinson and Ham 2008; Hamilton *et al* 2008). The focus groups confirmed that clinicians do want to engage in change. For some, this would be focusing mainly on leading change in their clinical work; for others, eg, clinical and medical directors, the balance would lean towards deeper involvement in managerial work.

The focus groups also raised issues around autonomy, some of which may be addressed by service-line management (SLM). SLM is one way to potentially increase engagement and improve productivity by identifying specialist clinical areas and managing them as distinct operational units (Monitor 2010). Hospitals operating with SLM have been shown to be more productive, have stronger clinical leadership, engage frontline staff in service performance, and be increasingly efficient (Ham 2009; Hall 2011; Foot *et al* 2012). However, they need to have delegated decision making in order for this to work effectively.

- ***Measuring engagement within the organisation***

Medical engagement can be measured (Dickinson and Ham 2008) and organisations can self-assess their engagement, identifying areas with opportunities for improvement. Junior doctors, in particular, felt that engagement would improve if trusts' feedback systems showed that trusts were listening to them.

Conclusion from the author's perspective

From the first day as a junior doctor, I felt a mixture of terror, excitement and pride. After all the years of training, I was finally starting to put my skills to good use. Three years in, and all three sensations still persisted, but increasingly I found myself questioning why I was still fearful. I realised that I was becoming increasingly aware of the problems in delivering care and the risks that this could bring to the patients.

Starting to think about patient safety led me to want to better understand how hospitals worked. Over time, this has led to my current roles of part-time clinician and part-time manager. Wearing two hats lets me see how important it is for clinicians to be actively leading change. For engagement to be successful, there needs to be increased emphasis throughout clinical careers: from career 'birth' to career 'grave', but also flexibly, allowing individuals to increase and decrease their commitments as their lives and careers demand.

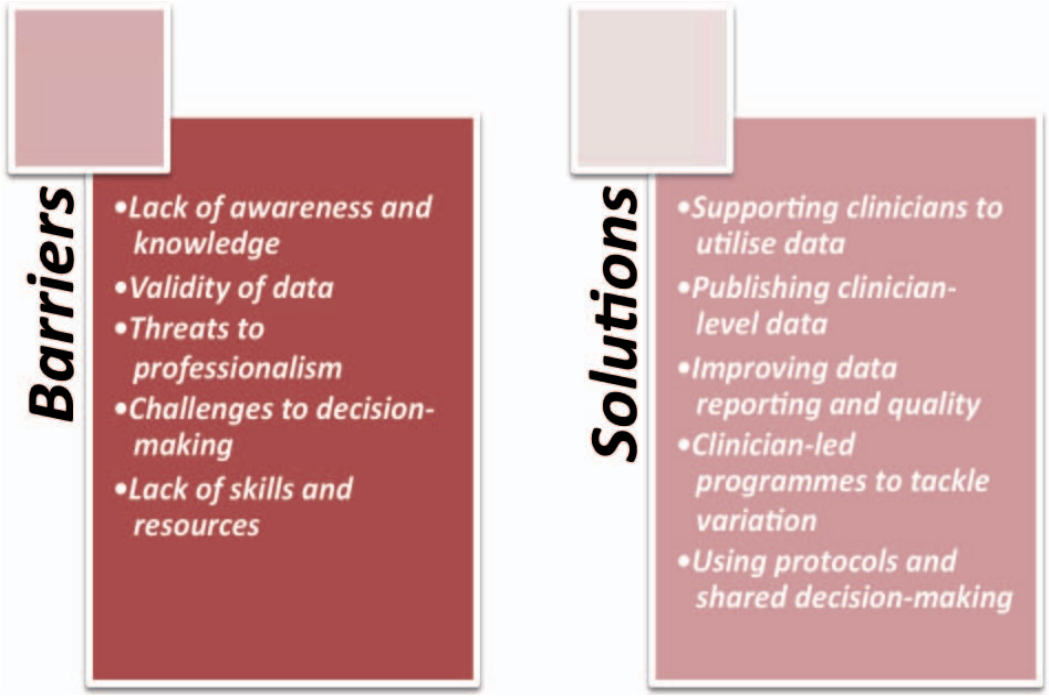
4 Tackling variation in clinical practice

Variation in health care is well recognised and can occur in many areas, including clinical activity, expenditure, performance, outcomes, quality, and access (NHS Confederation 2004). Variation occurs at different levels of organisations and between individual clinicians.

The Dartmouth Atlas identified three categories of care where variation exists: variation in effective care (in services that are evidenced-based, which indicates there may be underuse of services, a failure to deliver needed care, or overuse of other services); variation in supply-sensitive care (that is, differences in supply of services leading to variation in use); and variation in preference-sensitive care (due to differing risks and benefits of treatments) (Wennberg and Thomson 2011). The difficulty lies in trying to reduce 'bad' variation, while preserving the 'good' variation that makes care patient-centred (Mulley 2010). Some variation can be explained by differences in characteristics of individual patients and severity of illness (NHS Confederation 2004), but of particular concern is the undesirable or 'unwarranted' clinical variation that relates to care, which is not consistent with a patient's preference or related to their underlying illness (Wennberg and Thomson, 2011).

Recognising and addressing unwarranted variation, particularly in clinical activity, is vital to addressing productivity. We explore some of the barriers and solutions to tackling clinical variation identified in the literature and from doctors' perspectives, and the key points are also summarised in Figure 3 below.

Figure 3: Barriers and solutions to tackling variation



Barriers to tackling variation

It is recognised that there is considerable variation in clinical practice between hospital consultants (Bloor *et al* 2004). Some of the issues in addressing this variation are outlined below.

- ***Lack of awareness and knowledge***

In the past, reporting of health care variation data has not been systematic (Appleby *et al* 2010b), making it difficult for doctors to engage in tackling it.

Doctors reported that variation data have often not been provided on a regular basis or embedded in day-to-day practice.

Some doctors are still not aware that they are performing differently from their colleagues, and therefore it is difficult to have a debate about whether variation is unwarranted until the existence of variation is acknowledged (House of Commons Health Select Committee 2010; QIPP Right Care 2010).

Many doctors are becoming increasingly aware of variation; some orthopaedic consultants are more likely to recommend a knee replacement operation for the same level of clinical need when compared with their peers.

- ***Validity of data***

There are many difficulties in measuring variation. The most commonly cited include issues with case mix adjustment, missing data, failure to account for consultants' overall workload (such as teaching, management and research activities), difficulty in measuring and adjusting for other factors that could explain variation, and difficulty capturing variation for some specialties (House of Commons Health Select Committee 2010; Bloor *et al* 2008). But despite evidence showing that levels of variation are too great to be explained by issues in the recording and analysis of data alone (QIPP Right Care 2010), problems with data still represent a barrier to tackling clinical variation.

- ***Threats to professionalism***

Clinicians are also often resistant to external scrutiny (NHS Confederation 2004), and measures to tackle clinician variation can be seen as limiting professional judgement (Mulley 2009). However, the discussions should be constructive, around informing rather than blaming (Charlton *et al* 2011).

- ***Challenges to decision-making***

Clinical guidelines can seem to undermine a doctor's autonomy, and may not be applicable to their population (Robertson and Jochelson 2006; Cabana *et al* 1999). There may also be a lack of systems in place to remind clinicians, particularly non-specialists, of the current guidance at the point at which they need it (House of Commons Health Select Committee 2010). Doctors also face many competing pressures when making decisions, including clinical guidelines, patient choice, targets, costs, and incentives (British Medical Association 2011).

Doctors we spoke to also cite the challenges of accessing the right guidelines at the point of care, together with the time taken up by sifting through the large volume of clinical guidelines.

- ***Lack of skills and resources to implement change***

Publicising data alone does not guarantee that variation will be tackled, especially if there is a lack of understanding about what variation signifies, and what is required to tackle it (NHS Confederation 2004). Variation in

prescribing, ordering of investigations, and admission thresholds is likely to determine a large amount of other variation. At an individual level, clinicians receive little training in how to understand and respond to such data and often lack skills to implement change (Robertson and Jochelson 2006). At an organisational level, lack of staff, resources or managerial leadership may hinder change. We found that few clinicians had been trained in how to engage in performance management conversations or interpret and act on variation data, and for clinicians who are used to autonomy, engaging in this sort of discussion is often challenging.

Solutions to tackling variation

Doctors and frontline teams have the greatest potential to reduce clinical variations and improve productivity (Appleby *et al* 2010a; Ham 2009). Making a difference to variation requires high-quality clinical leadership, public disclosure of data, and support for those using the data (NHS Confederation 2004). Potential solutions to help overcome the barriers to tackling variation include the following.

Publishing clinician-level variation data

Reporting data at individual clinician level should be encouraged and should become routine (Society for Cardiothoracic Surgery in Great Britain & Ireland 2011). Unblinded 'report cards' of individual clinical variation data have been shown to be effective in tackling variation in the United States (Gauld *et al* 2011). However, the data should be used to inform local debate and allow further exploration rather than to 'judge' individuals (Charlton *et al* 2011).

Many doctors recognised the value of using individual-level data but some felt uncomfortable about shifting to publishing the individual clinician or team-level data, so this would need to be managed very carefully. The clinical managers focus group noted that some primary care trusts are now using non-anonymised individual clinician data to compare practice and seek explanations for large variation in practice. Junior doctors we talked to felt that examination of variation in their practice might offer useful learning opportunities and start to address variation.

The format of publishing the data is also important. Publishing data by ranking or 'league tables' has been shown to influence those with lower rankings; however, this can lead to anxieties about the role of chance in determining the ranking (Adab *et al* 2002), and that someone will always be ranked last. Some perceive that public disclosure of variation data, particularly by clinician outcomes, could encourage clinicians to 'cherry pick' patients for treatment, although some evidence suggests this is not the case (Bridgewater *et al* 2007).

Improving data reporting and quality

Centrally collated and reported data is one of the key factors in tackling variation (Appleby *et al* 2010b). Recent national programmes such as the NHS Atlas of Variation mean that data are starting to be published at a national level (Mayes 2011). Another example is the patient-reported outcome measures (PROMs) programme, where data are collected nationally and displayed at trust level (NHS Information Centre 2011). Local data

quality can also be improved by clinicians and information staff working together – for example, on joint ward rounds, using proformas for recording, and reminding doctors (particularly junior doctors) of the importance of accurate recording and its relevance to data quality (Royal College of Physicians 2007). One participant spoke positively about their accident and emergency (A&E) department, which sends out daily data on service-level performance of individual staff showing how well the service goals are being achieved – demonstrating the importance of timely data for clinicians.

Supporting clinicians to utilise performance and variation data

Doctors also need to be able to interpret the data and implement changes. There are systems and tools to help clinical teams detect variation – for example, by generating 'run charts' to identify random variation from 'real' variation. Wider application of such tools could facilitate monitoring and identification of variation (NHS Confederation 2004).

Clinician-led programmes to tackle variation

Although displaying variation data at clinician level can be a powerful lever to change practice (Chassin 2002), publishing data alone does not guarantee that it will always be used. Many of the doctors we spoke to accepted that clinical guidelines and performance data were necessary to tackle variation, but felt that to make them successful required a shift in culture. A report by The King's Fund recommended that local health organisations should have to justify their position on variation (Appleby *et al* 2010b) and this should involve clinicians.

Within hospitals, service-line management (SLM) is being increasingly used to allow clinicians to control budgets and improve performance. The information generated at service-line level can be used by clinicians to tackle variation (NHS Confederation 2004; NHS Confederation 2010; Foot *et al* 2012). One of the greatest challenges acknowledged by the clinicians was the cultural shift: *We cannot pretend to be running a service with safety and quality at its heart if we simply allow people to do what they feel appropriate, what they wish to do, regardless of the systems around them*. SLM/SLR (service-line reporting) was discussed as a way of enabling clinicians to lead services and engage in tackling variation.

Using protocols and shared decision-making

Clinical guidelines can also be useful in tackling variation and adapted to the local context through clinician-led protocols (NHS Institute 2008b). In our focus groups, comparisons with Intermountain Healthcare were made (James and Lazar 2007). Here, it is normal practice to follow guidelines, but there is an emphasis on allowing adaptation where required, and this is fed back to the local guideline owner. Doctors in the focus groups felt that guidelines and protocols would be more successfully implemented if developed and championed by clinicians locally. Some doctors also felt that clinical decision support systems are a useful way of managing the potentially large number of guidelines.

However, clinical guidelines are not adequate on their own, and the process of clinical decision is also important (Mulley 2010). Clinicians should be

establishing the 'right' level of variation based on patients' own assessments of need (Appleby *et al* 2010b) through the 'shared decision-making' process, which can reduce variation through addressing overuse and underuse of treatment and unwarranted variation in clinical practice (Coulter and Collins 2011).

Conclusion from the author's perspective

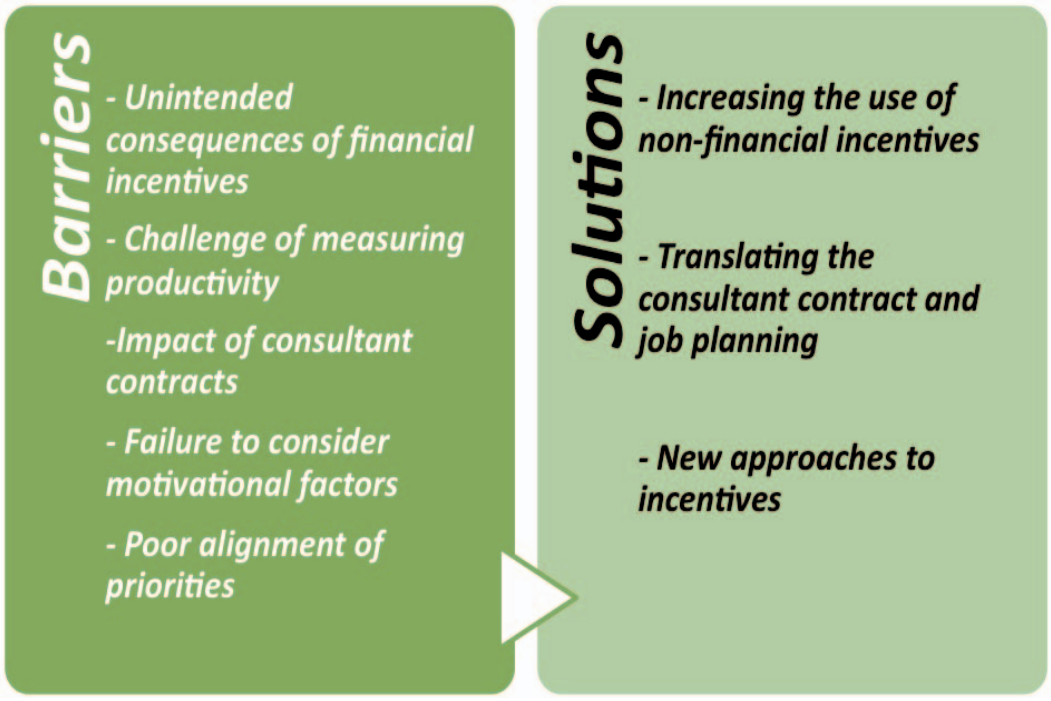
Starting out in medicine, I paid little attention to how much of the difference in treatment I saw was real or necessary. As a practising doctor and manager, I began to realise the importance of looking at variation and using guidelines as the starting point for patient management. From a personal perspective, using guidelines does not feel as if my clinical acumen or autonomy is diminished or that patients lose their individuality, since the skill lies in discovering the details from patients and identifying when or if to deviate from the guidance. This approach actually lets me spend more time on the other aspects of providing an individualised service, like communicating and explaining to the patients and their families. Where variation management is skillfully negotiated, such as at Intermountain Healthcare, or as part of national audits in the UK, it has the potential to be transformative for the patients receiving care, the organisations providing care, and the health care professionals delivering care.

5 Incentives to improve clinical productivity

An incentive is an explicit or implicit financial or non-financial reward for performing a particular act (Saltman 2002). Examples of non-financial incentives include flexible working hours, training and education, study leave (Buchan *et al* 2001), status, responsibility, and feedback about performance (Hicks and Adams 2001). Examples of financial incentives include *merit incentives,* which link pay to skills and performance. *Target payments* reward provision of a service to a specified proportion of the population (eg, screening). *Special payments* link pay to patient populations and workloads (eg, deprivation). *Profit-sharing incentives* allow doctors to invest as shareholders in their employing agency and gain a share of the benefits (Kingma 1999).

Incentives can be applied to stimulate changes in an individual employee's behaviour (eg, through pay) or to stimulate organisation-wide changes in performance (eg, national tariff system, Payment by Results (PbR), or Commissioning for Quality and Innovation (CQUIN) payments). This section focuses mainly on incentives for individuals.

Figure 4: Barriers and solutions to incentivising productivity



Barriers to using incentives to improve clinical productivity

The productivity of clinicians has come under increasing scrutiny. Incentives and remuneration can be used as methods for stimulating increased productivity and/or quality improvements at the level of the individual or the organisation, and can change culture and practice (Buchan *et al* 2001). However, there are issues associated with incentives. Some of the literature comes from incentivising quality improvement, efficiency or performance, and from primary care and US settings.

Unintended consequences of financial incentives

Financial incentives can lead to problems, including creating expectation, decreasing innovation, damaging teamwork, reducing the desire to undertake a task for its own sake, dysfunctional behaviour, and gaming (Binderman *et al* 2000; Hicks and Adams 2001; Maynard and Bloor 2010; McDonald and Roland 2009). Some of the doctors we spoke to felt that the current consultant contract had caused problems such as de-professionalisation, with one participant saying that: *There is disgruntlement if work done is not paid for, which is fuelling concerns that professionalism is being undermined*.

There are also opportunity costs to implementing incentive schemes and areas not directly linked to incentives may deteriorate (Maynard and Bloor 2010). For example, the Quality and Outcomes Framework (QOF) has been successful in many respects; however, once targets were reached, improvements in quality slowed and quality of care not linked to payment incentives declined (Campbell *et al* 2009; Glickman and Peterson 2009). A multifaceted approach to incentivising productivity is required.

Challenge of measuring productivity

Linking incentives to productivity improvement is also difficult, as measuring productivity is problematic. The Office for National Statistics (ONS) defines NHS productivity as the ratio of the volume of resources (inputs) to the quantity of health care provided (outputs), adjusted to reflect their relative costs and quality (National Audit Office 2010). It is challenging to make accurate adjustments for quality improvements, and there is often dispute about the 'best' or 'right' way to measure productivity (House of Commons Committee of Public Accounts 2011).

Impact of consultant contracts

The introduction of the new consultant contract has been problematic and so far not linked to any productivity improvement (House of Commons Committee of Public Accounts 2011). Issues with the implementation of the contract include: consultants rarely having their objectives linked to productivity metrics either as part of their job plans or formalised in another way; employers failing to incorporate appraisal in job planning; and lost opportunities to adjust consultant activity to meet organisational needs (NHS Employers 2008; House of Commons Committee of Public Accounts 2011).

Participants in the focus groups felt that the current consultant (and junior doctor) contract had created a shift to focus on time worked rather than output, which has been damaging. Some doctors felt an inequity between themselves and managers who appeared to be managed on outcomes rather than time.

Failure to consider wider motivational factors

The effectiveness of any incentive scheme (particularly financial) to elicit a change in behaviour depends on the characteristics of recipients, their autonomy, the context in which they practice, risks associated with the incentive scheme, and who bears those risks. Motivating professionals

requires policies that are responsive to individual needs, values, personality, environment and behaviour (Buetow 2007; Bennett and Franco 2000, cited in Hicks and Adams 2001). Often, development and implementation of incentives fail to take account of these complexities. One doctor commented that: *Despite shorter hours and more money, consultants have become more miserable.* Much attention was also placed on morale and how much the NHS depends on individuals going the extra mile. Another doctor described how a hospital had withdrawn provision of tea and biscuits for theatre staff and staff responded by refusing to stay beyond their allotted shifts, leading to reduced productivity.

Lack of alignment of priorities

There is often no alignment between individual and trust objectives in addressing productivity. The increased focus on quality of care has also meant that often, clinical staff have not been performance-managed on the cost or efficiency of their activities (House of Commons Committee of Public Accounts 2011), and it is not always clear how the quality improvement fits with productivity. Alignment of priorities is important for enabling incentives to be successful.

Participants felt that current financial incentives did not bear any relationship to organisational productivity or organisational strategy and often encouraged activities that took consultants away from the hospital, even if it was to benefit the wider health care system. One stated: *We have a hospital that needs to balance its books and we have a reward system that is out with the hospital. Now that is barmy! At least in general practice, the QOF is lined up within the practice.* Another participant stated that: *Many consultants are obsessed with new and expensive pieces of kit and how they can move their practice on to the next level… This is an attitude that begins at medical school and continues right through to the Clinical Excellence Awards (CEA) scheme*. However, there was a contrary view expressed that the CEA helped to compensate for the flat pay structure at the consultant level.

Solutions for incentivising productivity

At a local level, the following measures can be considered to incentivise productivity.

Increasing the use of non-financial incentives

Non-monetary incentives that motivate and induce a 'feelgood' factor can be very simple and effective (Binderman *et al* 2000). The Department of Health recognises that there is considerable scope for extending non-financial recognition for NHS consultants at a local level (Department of Health 2011). In addition to the non-financial incentives cited at the beginning of this section, achievement, recognition, type of work, responsibility, advancement, and knowing the outcome of one's own work are all excellent non-monetary rewards (Kotter 1996, and Scholtes 1998, both cited in Binderman *et al* 2000).

One view expressed was that: *Non-financial rewards offer recognition, not motivation.* However, many doctors in the focus groups were keen to encourage using non-financial incentives more and discussed how powerful

they could be. Examples cited included positive feedback, recognition for excellent teaching, and additional time for research.

Implementing the consultant contract

Few hospitals have used the levers within the contract, such as job planning, to improve productivity effectively (House of Commons Committee of Public Accounts 2011). Job planning should be used to align consultant output with local trust efforts. Areas of particular importance include agreeing shared objectives, identifying outputs, how time will be spent, how this will be measured, providing meaningful data, and engaging clinical service managers in job planning.

Doctors recognised that contracts were unlikely to change in the short term and expressed desire for better use of job planning. Rather than spending job planning sessions on sessional content, they could be used instead to discuss goals for the forthcoming year, identifying a route to achieving them. One doctor suggested that: *The single most important thing to improve implementation of the contract is a better understanding of the mobilisation of objectives through job plan meetings. It is easier to talk about where you will be on Wednesday morning than about what you are going to achieve this year – both for managers and clinicians – but everyone feels short-changed.*

New approaches to incentives

Another approach is to recognise the value of teamworking rather than just the individual, which can improve performance of the team, but the way in which it is implemented needs to be carefully considered (Binderman *et al* 2000).

Incentives such as local Clinical Excellence Awards could also be linked to performance through health services data and PROMs (Maynard, in House of Commons Committee of Public Accounts 2011). For financial incentives, lessons from implementation of QOF should also be used to shape changes to incentives programmes. In particular, the performance of the whole system needs to be monitored when implementing incentives schemes to reduce unintended consequences.

Conclusion from the author's perspective

Despite the relatively recent introduction of the new consultant contract, working to set time patterns has become ingrained in many doctors' behaviour. It is not uncommon to hear a focus on time worked rather than output achieved, and a resentment if set hours are broken. There is a worry that the consultants are now more likely to 'clock-watch', suggesting a loss of goodwill. Despite the changes in pay and time worked, doctors are generally less happy. It is clear how powerful pay and contracts can be in incentivising behaviour.

6 Developing new ways of working

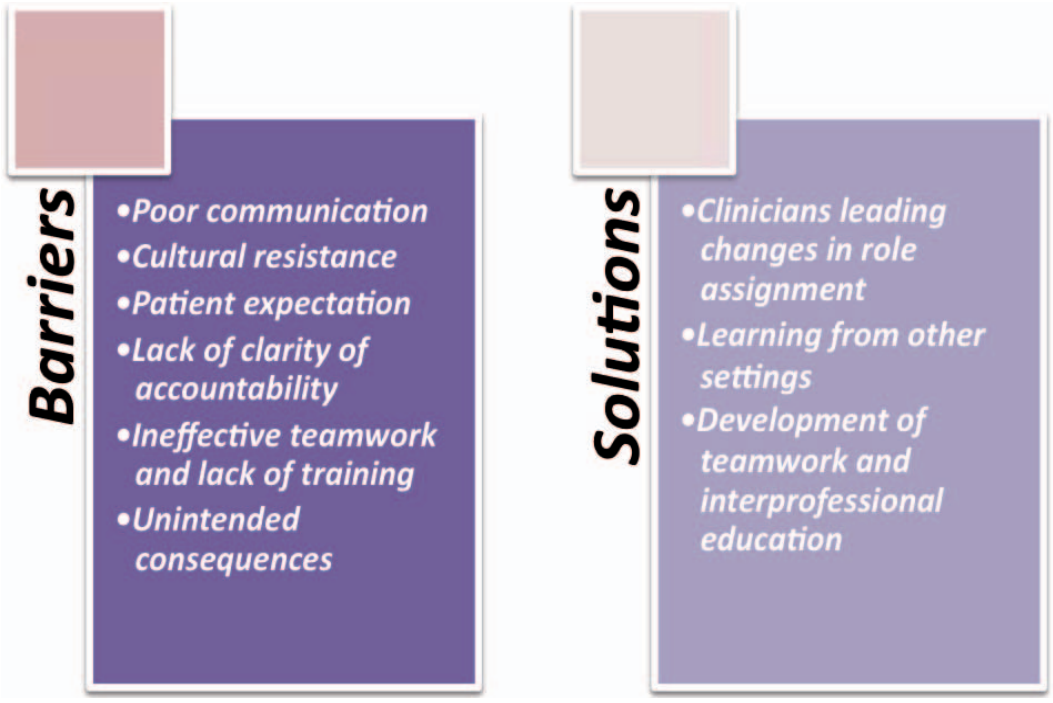
One way of tackling inefficiencies and increasing productivity is through innovative approaches to skill-mix (Appleby *et al* 2010a). Skill-mix describes the mix of posts, grades or occupations or the combination of activities or skills within the organisation (Buchan and Dal Poz 2002).

Skill-mix can be altered in several ways, including *substitution* (exchanging one type of worker for another); *delegation* (moving a task up or down the uni-disciplinary ladder); *innovation* (creating jobs by introducing a new type of worker); and *enhancement* (extending the role of a particular group of workers) (Sibbald *et al* 2004).

Role re-design can involve extending administrative/clerical roles to release caregivers from administrative duties; assistant practitioners doing tasks previously carried out by a registered professional; or advanced practitioners who are experienced clinical professionals undertaking tasks previously assigned to doctors (NHS Modernisation Agency 2004). Much of the literature looks at skill-mix of doctors and nurses (Buchan and Calman 2005), and nurse practitioners and physicians assistants are two examples.

We now look at some of the barriers and solutions to successfully implementing new ways of working. The key areas are summarised in Figure 5 below.

Figure 5: Barriers and solutions to new ways of working



Barriers to new ways of working

There are several barriers that can cause challenges to new ways of working. This section also draws on literature from primary care.

Poor communication

Limited explanation of the rationale for change in skill-mix or role re-design can reduce its success. Staff may also be unclear about whether substitution roles are 'assistive' or 'autonomous', and there may be confusion about responsibilities within the clinical team. Role titles can differ between organisations, causing confusion (Wakefield *et al* 2009; Sibbald *et al* 2004).

Focus groups felt that use of the term 'substitution' was demeaning to both the medical and non-medical staff, and that it created a threatening culture in which people were in fear of being replaced.

Cultural resistance

Staff often fail to discontinue old ways of working, and this can lead to an increase in costs, particularly when substituting one type of professional or transferring services between sectors. Changing skill-mix may not happen quickly as it depends on training, existing skills (Sibbald *et al* 2004), and a change in culture.

Lack of clarity of accountability

Many 'new' roles depend on supervision of doctors (Coplan and Meyer 2011). This requires doctors to have capacity for supervisory input and appropriate accountability mechanisms. Some doctors have concerns about the regulation of roles where, for example, nurses are acting independently (Academy of Medical Royal Colleges 2008). Focus groups drew a distinction between tasks that could be encoded in protocols and tasks that required clinical judgement. Some felt that staff who had not undergone medical training were often unsuitable for the latter. Some also felt that non-medical staff required considerable supervision and that ultimately, the responsibility still lay with the consultant.

Ineffective teamwork and lack of training

New ways of working are often created through changing or expanding clinical teams. Educational curricula have not always been updated to teach the skills needed to work effectively in varied teams (Thomas 2011). Training in silos, and the lack of a common strategy for education in medicine, nursing and public health can cause barriers to effective teamwork (Frenk *et al* 2010). Governance and accountability issues may also be a problem where a team is providing care through a new approach. Leadership is a critical factor in successful teamwork, and there is often a lack of leadership and management training, specifically in multidisciplinary team settings.

Unintended consequences

Substitute roles may generate new demand for care or address previously unmet needs, and therefore may not reduce doctors' workloads or contain costs of care (Bloor *et al* 2006; Laurant *et al* 2005). There is a risk that doctors' productivity may not increase if the use of time freed up by transferring or delegating work is not appropriately planned. Some studies have attempted to quantify potential cost savings, particularly of substitution, but the results have been mixed and are often context-

specific. There are also concerns that substitution may also lead to workforce shortages in other areas – eg, there may be a lack of nurses left to perform senior nursing roles (Sibbald *et al* 2004; Caplin-Davies and Akehurst 1999).

Doctors felt that the productivity benefits of changing the skill-mix were not always clear-cut, particularly around the cost-effectiveness of new ways of working, given the likelihood that consultants would still be required to provide some oversight. In addition, drawing senior nurses away from their current roles may impact negatively on productivity in other areas.

Solutions to new ways of working

The productivity challenge, along with policies such as the European Working Time Directive (EWTD), requires hospitals to develop new ways of working to deliver care. There are some limitiations cited in the literature, but key factors underpinning success relate to teamwork, leadership, clarity regarding roles, trust, respect, being valued in a team, cultural readiness within the workplace, and efforts to create a culture of acceptance of new ways of working (Clements *et al* 2007).

Improved communication, with clarity of roles and responsibilities

Improving consultation and communication with doctors can lead to a reduction in role conflict and confusion over new ways of working (Levenson *et al* 2008; Wilmot 1998, cited in Sibbald *et al* 2004). Successful introduction of new roles requires all stakeholders to be involved and well informed, and anticipating some of the potential problems enables more successful introduction of these new roles (Buchan *et al* 2007). In one trust, doctors have worked with managers to define the need and develop a response. They re-engineered a service so that consultants deliver the service 24/7 with physician assistants, trained in-house, and ST1–3 trainees. Junior doctors are able to learn better as they spend time directly with consultants in a more apprenticeship-type model. Despite some problems, this has been successful and well received by patients. As more non-medical staff perform roles traditionally done by trainee doctors, this may help to correct the currently unsustainable pyramidal medical training structure, where there are more doctors in training than consultant positions available. Clinicians in focus groups felt strongly that regulation of new roles was very important.

Development of teamworking and interprofessional education

Interprofessional education helps to break down professional silos and promote non-hierachical relationships so that teams function more effectively (Frenk *et al* 2010). Training in effective teamworking better enables staff to undertake multi-professional working (Long 1996, cited in Sibbald *et al* 2004), and training in teamworking in a trust setting can make learning more applicable to the local context. Leadership is also a critical factor in successful teamworking (Clements *et al* 2007), although some doctors have mixed views as to who should lead multidisciplinary teams (Levenson *et al* 2008). Local initiatives such as well-designed induction programmes can improve engagement and help to clarify roles (NHS Employers 2009).

Participants in the focus groups gave strong support for increased teamworking and recognised the benefits. There has been an increase in awareness of the need to train in teams – for example, encouragement of multi-professional enrolment on training courses such as those provided by the Resuscitation Council.

Conclusion from the author's perspective

My first experience of a neonatal unit was overwhelming… Walking into a room bursting with people and equipment, and hidden away were tiny fragile babies, requiring complex interventions and care. While there, I learned hugely from the advanced neonatal nurse practitioners (ANNPs). Not only were these clinicians highly skilled, they were extremely knowledgeable, approachable and keen to teach; and, uniquely, they knew about the role they currently inhabited – that of a junior doctor and that of the nurses. In areas such as neonatology, with shortages in workforce, having ANNPs has been invaluable.

Doctors' roles are changing, and the challenge is to build new systems that are flexible to changing health care needs and maximise utilisation of the skills of different professional groups, while recognising that these groups are not entirely homogenous, and doing so within governance structures that are not unwieldy.

7 Conclusion

Forty per cent of health service funding is spent on services provided by acute and foundation hospitals (National Audit Office 2010). Increasing productivity in secondary care will make a significant contribution to the overall productivity gains required in the NHS. In this report, we have looked at tackling productivity from a secondary care perspective through four main areas: medical engagement, tackling unwarranted variation, using incentives, and developing new ways of working. We have attempted to give an overview of some of the barriers and potential solutions, and although the doctors' views expressed in this report are not necessarily representative of all doctors, their views, combined with the literature, have highlighted several key areas to focus on. These are: the importance of clinical leadership; improving doctors' relationships with managers; and increasing knowledge and skills in the 'bigger picture' of health care.

To effectively address productivity, clinical leadership is required at all levels of the organisation. Enabling doctors to initiate and lead change underpinned many of the key areas discussed, and we found clinical leadership to be particularly important in tackling variation and successfully implementing new ways of working. Clinical leadership is also closely linked to medical engagement, and its importance was a reccuring theme. Service-line management and service-line reporting (SLM/SLR), in particular, were also cited in the literature and by doctors as an effective way of improving productivity, as the fact that doctors have greater autonomy over their service can increase engagement as well as facilitate clinicians to tackle variation.

Both the literature and the doctors themselves highlighted the importance of relationships between doctors and managers. However, we heard that in many cases these relationships needed to improve. Closer working between doctors and managers is required in order to improve communication and increase the likelihood of tackling productivity effectively. Doctors were keen to work more closely with managers, and this should be encouraged at all levels of the organisation and from an early stage in their careers.

Training doctors in areas such as management, leadership, teamwork, finance, and interpreting data would improve engagement with managers, improve functioning of teams, and equip doctors with skills to enable them to initiate and lead programmes to improve productivity. Knowledge and skills need to be developed to enable doctors to understand the 'bigger picture' of health care and improve their understanding of their role within the organisation and the system, as well as the importance of tackling productivity. Many doctors felt that this should form part of their education from an early stage, and the literature demonstrated the importance of interprofessional learning in this.

Given the large proportion of NHS spend on the medical workforce, doctors have a hugely important role to play in addressing productivity. There is an urgent need to deliver increases in productivity while maintaining quality in health care. This requires adapting current approaches and adopting new ones. There are also some lessons to be learned from primary care, particularly around new ways of working and incentivising doctors. We heard about many innovative solutions being developed at local level, and part

of the challenge is to evaluate what works and disseminate best practice. Change may not be comfortable and many doctors discussed reasons for this, but there was a recognition that, in order to deliver on the productivity challenge while continuing to provide the best care for their patients, clinicians need to adapt and evolve.

Recommendations

Based on the literature and our discussions with doctors, we make the following recommendations.

Engaging clinicians

Medical engagement provides the foundation for improving productivity. Doctors have a large influence over the use of health care resources, are often leading health care teams, and can directly influence the success of initiatives to address productivity. Key areas for improvement are:

- ***prioritising and supporting clinical leadership***
- ***training and leadership development*** to equip doctors with skills in management, leadership and teamwork, so that they can understand their role in the organisation and health care system and to enable them to initiate and lead changes effectively
- ***support for experimentation and innovation.***

Tackling variation

Tackling clinical variation has been shown to be one of the most important ways to address productivity, especially at the individual clinician level. Key strategies for improvement are:

- ***supporting clinicians to utilise performance and variation data*** by providing training in interpreting data and enabling them to tackle variation at a local level
- ***publishing variation data at individual clinician level*** in order to increase awareness of variation and feedback performance
- ***improving data reporting and quality*** at all levels, but particularly at a local level, so that data can be systematically produced and used to identify and tackle variation in a more effective way
- ***clinician-led programmes to tackle variation*** through methods such as SLM, which can increase engagement and autonomy
- ***increased use of protocols and shared decision-making*** to tackle variation at a local level, and to increase engagement by ensuring that protocols and guidelines are developed with clinician involvement.

Incentivising productivity

Financial incentives have their place and have been shown to be successful in improving care in many areas. However, there are several issues with current financial incentives systems, and many doctors feel that non-financial

incentives are increasingly important in order to incentivise productivity. Key strategies for improvement are:

- ***implementing the consultant contract*** in the way in which it was intended and making more effective use of job planning by aligning personal objectives with organisational priorities to address productivity
- ***increasing the use of non-financial incentives*** to tackle productivity through recognition, training, additional time for education, research and teaching, and relating supporting professional activities (SPAs) to the priorities of the organisation.

Developing new ways of working

Changing roles and skill-mix is challenging. In order to embed new ways of working into practice, the following are recommended to increase the likelihood of success of new ways of working in addressing productivity:

- ***development of teamwork ethos and inter-professional education*** from an early stage in clinical careers to ensure effective functioning of multidisciplinary teams and to embed new roles
- ***improved communication, with clarity of roles and responsibilities;*** introduction of any new role should be supported by an effective communications and change management strategy, providing clarity about roles and responsibilities.

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